

Article by Mabel Hubbard Bell, December 11, 1907, with transcript

A RESUME OF MR BELL'S KITE EXPERIMENTS WRITTEN BY MABEL G. BELL AND COPIED FROM AN OLD NOTE BOOK DEC 11, 1907. GHG.

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Mabel G. Bell. Tetrahedral kite work.

There can be no such thing as experts in a science or art that does not yet exist.

The only way in which to approach such a thing is as a student enquiring "Is this so".

Considerations both theontically and practically correct in other sciences may have little weight in the new. It is impossible therefore to say that what is a law in one science is also a law in the new one.

A practical commercial Flying Machine has not yet been invented, why otherwise the formation of the Aerial Experimental Association. Therefore why compare the tetrahedral kite with any other. Why in short, assume anything at all. Other experiments are attacking the problem from other sides, why scatter the forces of our association by trying to cover the ground other are also trying to cover.

Mr Bell's point of view has all along been this to get one thing done before attempting another. He took the Hayrave box kite and tried to adopt that form in building an air supporting surface, he could not do it. The problem then became the discovery of some form of construction that would yield a strong air supporting surface capable of indefinite expansion without increase of weight on any given point. The tetrahedral system is 3 the

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result of his studies, in his attempt to solve the problem of a practical way to build a big air supporting surface where no one part is heavier in a big structure than in a small one.

Having got his form of construction the next point was to make it stable.

He has made it, so by means of oblique surfaces His next point was a means of sending it into the air.

He has sent it up by means of pulling it as a boy pulls a kite.

This becomes impracticable with a big structure so he tried to find some other means which would yet represent the boy.

For this he has provided the Blue Hill steamer which has now performed the job.

Air supported structures of all kinds are still liable to come down suddenly because Aviation is not yet a science hence Mr Bell deemed it necessary to find a medium wherein they could fall with the least injury, he finds it in water therefore he has been trying to make such a form that it can fall in the water with as little injury as possible and live on the water.

He has succeeded in building an air supported surface that will fall down and live on the water even 4 in a storm, without injury to itself or its occupant.

He now possesses, or did before the destruction of the Cygnet;— an air supported structure of which these things were proved and demonstrated.

1. It could and did support a man weighing 175 lbs in the air at a height of 168 feet above the water.
2. It did go up in the air steadily and gently on even keel, carrying a man weighing 175 lbs.

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3. It came down when the air failed, steadily and gently on even keel and alighted without injury on the water and lived there although quite a sea was on.

4. It was very steady and flew on even keel while in the air and remained up as long as the air maintained the strength demonstrated as necessary to support it.

There is no question that it has done all these things because they have been done.